

Message

---

**From:** Shams, Dahnish [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B7037E39BB6341C8850BCDC61BF9D65A-SHAMS, DAHN]  
**Sent:** 12/5/2013 2:03:29 PM  
**To:** Alexander, Laurie [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=1b0c420c5c71464b922e50788a1c22de-Alexander, Laurie]; Avery, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b0fc9e70467647709fa9377dfb987f10-Avery, James]; Ball, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=23706223c8c64ebcbbaa656517f2b09c-Ball, James]; Barone, Stan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=a4f8618acbb418da24c110f3123a2af-Barone, Stan]; Bateson, Thomas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=29bfdde020bf4e93b431b9a72d9d230f-Bateson, Thomas]; Berner, Ted [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f1949c9653024d3cb4aa4c2bd69c4fde-Berner, Ted]; Birchfield, Norman [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c910f2fd28414e819b6afe6dda525e9f-Birchfield, Norman]; Blessinger, Todd [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f5240ca690c84f8fb20bac6fd7273fd5-Blessinger, Todd]; Bonanni, Christina [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=778b05db9dbd457c9d2301e370e06a79-Bonanni, Christina]; Boone-Edwards, Amanda [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=304ccd01957044a1bd50a366d1cd76d4-Boone, Amanda]; Brinkerhoff, Chris [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8d96248a62bd42db9a6cd12e5adedaa5-Brinkerhoff, Chris]; Buckley, Barbara [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4bb6dedc12624295b9e8e5f835a1f166-Buckley, Barbara]; Burgoon, Lyle [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fcec79fdcce947348d1a387abb06d727-Burgoon, Lyle]; Bussard, David [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cf26b876393e44f38bdd06db02dbbfe5-Bussard, David]; Cai, Christine [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8e5901665d14498983704fd9eeda0dd8-Cai, Christine]; Carmichael, Brenda [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5b8cc5a092544bcda1007b69d2c2589a-Carmichael, Brenda]; Chiu, Weihsueh [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9895659b6eb34dcabe92d46ca7b3b2f7-Chiu, Wuehsueh]; Choudhury, Harlal [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=98522d9e14344938b8cc528e591749eb-Choudhury, Harlal]; Brinkerhoff, Chris [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8d96248a62bd42db9a6cd12e5adedaa5-Brinkerhoff, Chris]; Christensen, Krista [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c011e25ffb9a41cd8c835f871259aa84-Christensen, Krista]; Cogliano, Vincent [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=51f2736376ac4d32bad2fe7cfef2886b-Cogliano, Vincent]; Corona, Elizabeth [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=18d86fb8269b4557b5d06622b3a941af-Corona, Elizabeth]; Cote, Ila [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8451c70416dc4c899ae0873b153fd592-Cote, Ila]; Cubbison, Christopher [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e1b702ba5f394a15a49c5efad199035a-Cubbison, Christopher]; CURTIS, LUCY [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3a21f5f56d814956b31d1e826ac5f71f-CURTIS, LUCY]; D'Amico, Louis [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=78a91f83c4414910be286efe02004dbc-D'Amico, Louis J.]; Deener, Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=b9a2ff1c086249ea8f6414afde8a5e54-Deener, Kathleen]; Euling, Susan [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=cb0873315ed244fa852df546e1191e4c-Euling, Susan]; Evans, Amanda [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=1fbe480e70b0407d940b13c2c16b4927-Evans, Amanda]; Field, Malcolm [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=8d12938447d14c7babcf431d75d745f6-Field, Malcolm]; Flowers, Lynn [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=1a4411c874d041b9a8badfc32b91bd70-Flowers, Lynn]; Frederick, Bob [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=fd3238c238384b74afb279085c3a42d3-Frederick, Bob]; Frithsen, Jeff [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=e3743bd6f3c345baaae407c1d6f78e92-FRITHSEN, JEFF]; Galizia, Audrey [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=b9b75d310aba41448cef769d77486e7c-Galizia, Audrey]; Gamble, Janet [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9f345a4a1e5e45fdbb51817c8d129f95-Gamble, Janet]; Gatchett, Annette [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=f12d699a71f84e21bddbb876dae7f96c-Gatchett, Annette]; Gehlhaus, Martin [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=bc091da1fa684dd89435443c87c4f9a5-Gehlhaus, Martin]; Gibbons, Catherine [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=2ac775a35a0945718edc7e02f50e6c12-Gibbons, Catherine]; Gillespie, Patricia [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=362d863e707b496f9b94474ae4b3df30-Gillespie, Patricia]; Glenn, Barbara [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7a2dc9210d2d4d02a623b33f87f49436-Glenn, Barbara]; Grambsch, Anne [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=a28debe50c0e42ce937b0d01c12eb4b2-GRAMBSCH, ANNE]; Guyton, Kate [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=872d285e7848492cbe9ab0325c0fbadf-Guyton, Kathryn]; Gwinn, Maureen [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=4bdc5237a5c440a7b664518e23eb5647-Gwinn, Maureen]; Hammerstrom, Karen [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=ce542655bfdd4b8c9e8313f76f265a1d-Hammerstrom, Karen]; Hawkins, Belinda [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=075561d171e845828ec67a945663a8e6-Hawkins, Belinda]; Hogan, Karen [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=eb7dc31713d443f0a322f0163d8d7c73-Hogan, Karen]; Hotchkiss, Andrew [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=10f01ccc8611401bb34d16b71a87d3d5-Hotchkiss, Andrew]; Jarabek, Annie [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=8b1de54d48e1429c8129f6499211dbdb-Jarabek, Annie]; Jinot, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=d0edf66a00054afe84f4ab5c5119562f-Jinot, Jennifer]; Johnson, Maureen [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=bcd265492be044379eafedd1fb0cff1e-Johnson, Maureen]; Jones, DebraL [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=38b89ba9317a475ca671ae9fe840e00d-Jones, DebraL]; Jones, Samantha [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=eac77fe3b20c4667b8c534c90c15a830-Jones, Samantha]; Kadry, Abdel-Razak [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=acb325507bf7451b9735813cfde5e417-Kadry, Abdel-Razak]; Keshava, Nagalakshmi [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=d125c2980ab348ec828ba8f513b95049-Keshava, Nagalakshmi]; Knecht, Helen [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=38ad7ad563a74b688b73e812580aa6a1-Knecht, Helen]; Kopylev, Leonid [/o=ExchangeLabs/ou=Exchange Administrative Group

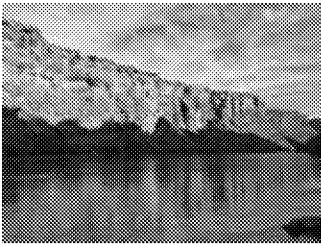
(FYDIBOHF23SPDLT)/cn=Recipients/cn=abfe6798809e4c8c8a27452ec86726d8-Kopylev, Leonid]; Kraft, Andrew  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=4a94a4f199b247778abb02285a51b927-Kraft, Andrew]; Lee, Janice  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=b5d72226848849279376f33f6d0b9845-Lee, Janice]; Long, Tom  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7526c52b77aa4516b9ac197536e5a6a0-Long, Tom]; Luke, April  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=b98bf69c14b142d3ac8e0e9132ee36ed-Luke, April]; Makris, Susan  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7654051d8d1240a39dfa9463c9b0b7e5-Makris, Susan]; Marcus, Allan  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=44262baf275b473a9a1c210e8fce927e-Marcus, Allan]; McLanahan, Eva  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7945c69bff4e440f86bb47914ad1b195-McLanahan, Eva]; Moore, Danielle  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=979ea3cb9c2f4da4ac701d93cb24c17d-Moore, Danielle]; Murphy, Patricia  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=4e02a7540f8042fda07eed1248addaf7-Murphy, Patricia]; Newhouse,  
 Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=5f019c8179304045acd61bc05b571fb0-Newhouse, Kathleen]; Olden,  
 Kenneth [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=8979224c77ea4d559f70cab1688f28aa-Olden, Kenneth]; Owens, Beth  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7a35939bccca4a2197d5e4446bb83d67-Owens, Beth]; Perovich, Gina  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=6e3c19d7f4db41bfa2477aa27ad83945-Perovich, Gina]; Persad, Amanda  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=fd13fdf1bd814755baac109c2ab990a0-Persad, Amanda]; Petersen, Dan  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=05e14a620a164436adfae701533b4cd5-Petersen, Dan]; Powers, Christina  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=bf0dabe0c058478294128cb3f842573d-Powers, Christina]; Pratt, Margaret  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=8eda90b62a874c7ea9d857903ac1fd14-Pratt, Margaret]; Preuss, Peter  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=a81d3a8adf6042bf817fb9430995f1cf-Preuss, Peter]; Raffaele, Kathleen  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=cc48281bbab34bf5bf3ab1a63780d5ca-Kathleen Raffaele]; Reid, Jon  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=ca086bff39cf47e08b2467276e49ee1c-Reid, Jon]; Rieth, Susan  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=00aac63cc995489188b8a449aaa18f5e-Rieth, Susan]; Ris, Charles  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=499c2dcf04a44033964557f2dac741c6-Ris, Charles]; Ross, Christine  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=a710775410ae4c74bf004da51c04f37a-Ross, Christine]; Ross, Mary  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross, Mary]; Rutigliano, Marian  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=a76f86c1ae9540b6b9ebaeb95a7804b9-Rutigliano, Marian]; Salazar, Matt  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=f459cb14ae8946f3bede7df718cf26f-MSALAZAR]; Sams, Reeder  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7d5b479ccd894cea99ae55df20de6971-Sams, Reeder]; Sanchez, Yolanda  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=473c34ae73994a4a8acafe6f03e0baeb-Sanchez, Yolanda]; Sasso, Alan  
 [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8cb867519abc4dcea88149d12ef3e8e9-Sasso, Alan]; Schlosser, Paul  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=121cf759d94e4f08afde0ceb646e711b-Schlosser, Paul]; Segal, Deborah  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=bcdd984267644f3fb89ea65f65e6f422-Segal, Deborah]; Shams, Dahnish  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=b7037e39bb6341c8850bcd61bf9d65a-Shams, Dahn]; Shaw, Denice  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=556182b3879649039b11d36e5e09d9aa-Shaw, Denice]; Sheth, Christopher  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=c2ea3dd8b8bd4e60b955b8feffab886c-Sheth, Christopher]; Slimak, Michael  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=197d6551afaf4d90b087c4d5bf62b53c-Slimak, Mike]; Sonawane, Bob  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=a30dc04805854452837bcabc6b2954ab-Sonawane, Bob]; Spassova, Maria  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=3a42ea04b134467c8a0c9c3faf0c25f7-Spassova, Maria]; Strong, Jamie  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=ea753aafefb74c268550fe6a2c187838-Benedict, Jamie]; Suter, Glenn  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=86ff3a58b76b40e4a75d9441bd584153-Suter, Glenn]; Troyer, Michael  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=847b0020dd0e457e85f994a1ad64b26d-Troyer, Michael]; Vandenberg, John  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=dcae2b98a04540fb8d099f9d4dead690-Vandenberg, John]; Vinikoor-Imler,  
 Lisa [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=e604bf3ac6d8405eb0bd76901bd71fee-Vinikoor-Imler, Lisa]; Vulimiri,  
 Suryanarayana [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=1a4f972302434ec6a04b015b14845a9d-Vulimiri, Suryanarayana]; Walker,  
 Teneille [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=3178e8a3caed4d329b2f6337a3a77be1-Walker, Teneille]; Walsh, Debra  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=d4fd965338fc4d449c2954945c41de46-Walsh, Debra]; Wang, Nina  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=5cf158271fec4684844d018286992071-Wang, Nina]; White, Paul  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=4e179825823c44ebbb07a9704e1e5d16-White, Paul]; Woodall, George  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=a617aad87171414a8b9fca5ce395a899-Woodall, George]; Wright, Barbara  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=dfba2092dc02494d8299aef8d84abc95-Wright, Barbara]; Wright, Michael  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=0087b3fe163145869deead8b626fbfa3-Wright, Michael]; Yang, Hui Min  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=545e2f07f7aa4392a4b7bd3b7fc5886c-Yang, Hui Min]; Zwyer, Bette  
 [/o=ExchangeLabs/ou=Exchange Administrative Group  
 (FYDIBOHF23SPDLT)/cn=Recipients/cn=79830e38edb14034b7e47e29ed213dab-Zwyer, Bette]

**Subject:** News Update: Fracking, Connectivity, Mining Studies Among EPA Research Priorities in 2014 (BNA Report)

## **Research**

### **Fracking, Connectivity, Mining Studies Among EPA Research Priorities in 2014**



*By Anthony Adragna*

Dec. 4 — The Environmental Protection Agency's top research priorities for 2014 include release of a draft report on the potential impacts of hydraulic fracturing on drinking water resources, completion of a final assessment on the potential effects of large-scale mining in Bristol Bay, Alaska, and a review of a water connectivity study that will influence Clean Water Act rulemakings.

Robert Kavlock, EPA deputy assistant administrator for science, told the agency's Science Advisory Board that completing the first national survey of the nation's wetlands, releasing information on how to decontaminate equipment from highly toxic substances and publishing the agency's "Report on the Environment" would also be top research priorities.

Despite the effects of sequestration, pay freezes, limited employee travel, the lack of a long-term budget and the government shutdown, "we've actually had a good year in productivity" for the agency's research division, Kavlock said.

The EPA Office of Research and Development is the agency's scientific research arm and helps provide the underpinning of science and technology for EPA activities.

### **Connectivity Review Scheduled**

The connectivity study, which will document the role of small streams and wetlands in filtering pollutants, storing water and preventing floods, will undergo SAB review from Dec. 16-18, Kavlock said.

Released for public comment in September, the draft study said ephemeral and intermittent wetlands, streams and open waters in floodplains are connected to waterways downstream and could be subject to EPA regulation (188 DEN BB-1, 9/27/13).

The final version will serve as the basis for a rule to define U.S. waters and clarify the Clean Water Act's jurisdiction for the agency.

The EPA and the U.S. Army Corps of Engineers have said they won't release the proposed rule until the SAB completes its work.

Republicans in the Senate and House have urged the EPA to withdraw the proposed Clean Water Act jurisdiction rule from review by the White House Office of Management and Budget (223 DEN A-3, 11/19/13).

### **Mining Assessment Expected Soon**

Kavlock said a final assessment on potential large-scale mining operations in the Bristol Bay area was awaiting "final clearance" at the EPA and should be released soon. EPA's updated draft version of the Bristol Bay Watershed Assessment, released in April, examined the potential impacts of large-scale mining on the region's fisheries and wildlife.

Two mining companies—Anglo American Plc and Northern Dynasty, a small Canadian company— had formed the Pebble Limited Partnership in hopes of developing the Pebble Mine in the area. If built, the mine would be one of the world's largest open-pit copper mines.

When Anglo American dropped out of the partnership in September, pre-permitting engineering, environmental design and regulatory planning was about 90 percent complete for the project (227 DEN A-19, 11/25/13).

Northern Dynasty urged the EPA in July to drop its assessment of the area, calling the assessment a "theatre of the absurd" (128 DEN A-16, 7/3/13).

### **Draft Fracking Study**

The EPA plans to release its draft report analyzing the potential impacts of hydraulic fracturing on drinking water by the end of 2014, Kavlock said.

In December 2012, the agency issued a progress report on the study when it was originally supposed to have released preliminary findings. An agency official said the expected date of completion of the study would slip until 2016 from the original 2014 date (122 DEN A-14, 6/25/13).

The study will analyze as much existing industry data and scientific literature as possible. In addition, it will produce original research, including case studies from several shale gas regions.

Kavlock also said the research division of EPA would release the first national survey of wetlands in 2014. The survey will aim to develop a process for evaluating wetland quality, ecosystem services and stressors, he said.

Another priority will be securing Senate confirmation of Thomas Burke to be assistant administrator for research and development. On Nov. 7, President Barack Obama nominated Burke, currently associate dean for public health practice and training at the Johns Hopkins Bloomberg School of Public Health in Baltimore (218 DEN A-12, 11/12/13).

To contact the reporter on this story: Anthony Adragna in Washington at [aadragna@bna.com](mailto:aadragna@bna.com)

To contact the editor responsible for this story: Larry Pearl at [lpearl@bna.com](mailto:lpearl@bna.com)

Dahnish Shams  
Science Communications Contractor  
National Center for Environmental Assessment  
Office of Research and Development  
W: 703-347-0167